

September 28, 2021

Ms. Jennifer Ellette
Environmental Specialist
ONEOK Rockies Midstream, L.L.C.
P.O. Box 871
Tulsa, OK 74102-0871

Re: Air Quality
Title V (Renewal)
Permit to Operate

Dear Ms. Ellette:

Pursuant to the Air Pollution Control Rules of the State of North Dakota, the Department of Environmental Quality (Department) has reviewed your permit renewal application dated June 21, 2021 for the Grasslands Gas Plant located in McKenzie County, North Dakota.

Enclosed is a copy of the Department's draft/proposed Title V Permit to Operate and statement of basis for the facility. Before making final determinations on the permit application, the Department provides for public comment by means of the enclosed public notice, to be immediately followed by a 45-day Environmental Protection Agency (EPA) review period. As indicated in the notice, the 30-day public comment period will begin October 7, 2021 and end November 5, 2021.

If any changes are subsequently made to the draft permit, then a review copy of the proposed permit reflecting those changes will be provided to EPA prior to the start of a 45-day EPA review period. The 45-day EPA review period will begin November 6, 2021 and end December 20, 2021.

All comments received will be considered in the final determination concerning issuance of the permit. The Department will take final action on the permit application following the public comment period and the EPA review period. You will be notified in writing of our final determination.

If you have any questions, please contact me at (701)328-5218 or email kkschneider@nd.gov.

Sincerely,



Kyla K. Schneider
Environmental Scientist
Division of Air Quality

KKS:saj

Enc:

xc/enc: Dan Fagnant, EPA/R8 (email - fagnant.daniel@epa.gov)
Gail Fallon, EPA/R8 (email - fallon.gail@epa.gov)

4201 Normandy Street | Bismarck ND 58503-1324 | Fax 701-328-5200 | deq.nd.gov

Director's Office
701-328-5150

Division of
Air Quality
701-328-5188

Division of
Municipal Facilities
701-328-5211

Division of
Waste Management
701-328-5166

Division of
Water Quality
701-328-5210

Division of Chemistry
701-328-6140
2635 East Main Ave
Bismarck ND 58501

NOTICE OF INTENT TO ISSUE AN
AIR POLLUTION CONTROL
TITLE V PERMIT TO OPERATE

Take notice that the North Dakota Department of Environmental Quality (NDDEQ) proposes to issue a renewal Air Pollution Control Permit to Operate to ONEOK Rockies Midstream, L.L.C. for operation of the Grasslands Gas Plant in accordance with the ND Air Pollution Control Rules. The facility is located at the SE¼ of Section 36, T148N, R105W near Alexander in McKenzie County. The facility processes natural gas for delivery to market. The ONEOK Rockies Midstream, L.L.C. mailing address is 100 West Fifth Street, Tulsa, OK 74103. There are no changes in potential emissions.

A thirty-day public comment period for the draft permit will begin October 7, 2021 and end November 5, 2021. Direct comments in writing to the NDDEQ, Division of Air Quality, 4201 Normandy Street, Bismarck, ND 58503-1324 or email AirQuality@nd.gov, Re: Public Comment Permit Number AOP-28426 v6.0. Please note that, to be considered, comments submitted by email must be sent to the email address listed; comments sent to any other email address **will not** be considered. Comments must be received by 11:59 p.m. central time on the last day of the public comment period to be considered in the final permit determination. A public hearing regarding issuance of the permit will be held if a significant degree of public interest exists as determined by the NDDEQ. Requests for a public hearing must be received in writing by the NDDEQ before the end of the public comment period.

The notice, draft permit, statement of basis and application are available for review at the NDDEQ address and at the Division of Air Quality website at <https://deq.nd.gov/AQ/PublicCom.aspx>. A copy of these documents may be obtained by writing to the Division of Air Quality or contacting Kyla Schneider at (701)328-52185 or emailing kkskchneider@nd.gov.

Dated this 28TH day of September 2021

James L. Semerad
Director
Division of Air Quality

**AIR POLLUTION CONTROL
TITLE V PERMIT TO OPERATE**

Permittee: Name: ONEOK Rockies Midstream, L.L.C. Address: 100 West Fifth Street Tulsa, OK 74103-4298	Permit Number: AOP-28426 v6.0 Source Name: Grasslands Gas Plant Source Type: Natural Gas Processing
Source Location: Alexander, ND 58831 SE¼, Sec. 36, T148N, R105W 47.5922 Lat., -104.0008 Long. McKenzie County	
Expiration Date: December 26, 2026	

Pursuant to Chapter 23.1-06 of the North Dakota Century Code (NDCC), and the Air Pollution Control Rules of the State of North Dakota, Article 33.1-15 of the North Dakota Administrative Code (NDAC), and in reliance on statements and representations heretofore made by the permittee (i.e., owner) designated above, a Title V Permit to Operate is hereby issued authorizing such permittee to operate the emissions units at the location designated above. This Title V Permit to Operate is subject to all applicable rules and orders now or hereafter in effect of the North Dakota Department of Environmental Quality (Department) and to any conditions specified on the following pages. All conditions are enforceable by EPA and citizens under the Clean Air Act unless otherwise noted.

Renewal: TBD

James L. Semerad
Director
Division of Air Quality

Grasslands Gas Plant
Title V Permit to Operate
Table of Contents

<u>Condition</u>	<u>Page No.</u>
1. Emission Unit Identification	3
2. Applicable Standards, Restrictions and Miscellaneous Conditions	4
3. Emission Unit Limits	7
4. Monitoring Requirements and Conditions	8
5. Recordkeeping Requirements	11
6. Reporting	13
7. Facility Wide Operating Conditions	14
8. General Conditions	21
9. State Enforceable Only Conditions (not Federally enforceable)	27

1. **Emission Unit Identification:**

The emission units regulated by this permit are as follows:

Emission Unit Description	Emission Unit (EU) ^A	Emission Point (EP)	Air Pollution Control Equipment
Natural gas-fired regeneration heater rated at 2.73 x 10 ⁶ Btu/hr	1 (Reg) [H-101]	1	None
Natural gas-fired regeneration heater rated at 2.73 x 10 ⁶ Btu/hr	2 (Reg) [H-402]	2	None
Natural gas-fired regeneration heater rated at 2.73 x 10 ⁶ Btu/hr	3 (Reg) [H-404]	3	None
Natural gas-fired regeneration heater rated at 5.14 x 10 ⁶ Btu/hr	4 (Reg) [HE-15.07]	22	None
Natural gas-fired hot oil heater rated at 43.75 x 10 ⁶ Btu/hr (1981)	1 (Hot oil) [H-401]	4A, 4B	None
Natural gas-fired hot oil heater rated at 43.75 x 10 ⁶ Btu/hr (1981)	2 (Hot oil) [H-405]	5	None
Natural gas-fired hot oil heater rated at 45.8 x 10 ⁶ Btu/hr (2007, Dc)	4 (Hot oil) [HE-3800]	21	None
Natural gas-fired auxiliary steam boiler rated at 21.0 x 10 ⁶ Btu/hr (pre-1989)	1 (Auxiliary) [BO-402]	7	None
Natural gas-fired auxiliary steam boiler rated at 21.0 x 10 ⁶ Btu/hr (pre-1989)	2 (Auxiliary) [BO-403]	8	None
Natural gas-fired inert gas generator (boiler) rated at 17.75 x 10 ⁶ Btu/hr (pre-1989)	1 (Inert) [BO-701]	9	None
Natural gas-fired inert gas generator (boiler) rated at 17.75 x 10 ⁶ Btu/hr (pre-1989)	2 (Inert) [BO-702]	10	None
Caterpillar G-399NA (4SRB) natural gas-fired emergency generator engine rated at 800 bhp (pre-2007) (ZZZZ)	1 (Gen) ^B [1-Gen]	11	None
Acid gas/process/emergency flare (130 ft)	1 (Flare) [1-Flare]	13	None
Bulk engine oil tank with a capacity of 210 barrels	1 (Oil) ^C [UTK-2]	14	None
Bulk used oil tank with a capacity of 300 barrels	[USED OIL] ^C	--	None
Slop water tank with a capacity of 414 barrels	TK-103 ^C [TK-1]	--	None
Amine (DEA) tank with a capacity of 250 barrels	1 (DEA) ^C	16	None
TEG dehydrator (HH)	2 (Dehy)	4A, 4B ^D	Heater (1 Hot oil) ^D

Emission Unit Description	Emission Unit (EU) ^A	Emission Point (EP)	Air Pollution Control Equipment
Natural/inlet gas-fired glycol regeneration boiler rated at 0.94 x 10 ⁶ Btu/hr	2 (Glycol) [H-7801]	17	None
Natural gas-fired steam boiler rated at 28.75 x 10 ⁶ Btu/hr (pre-1989)	1 (Boiler) [H-602]	18	None
Methanol storage tank with a capacity of 200 barrels	1 (Methanol) ^C [TK-M1]	0	None
Truck loading of produced water at approximately 2.0 MM gallons/year	PW (Loading) ^C [TL-4]	Fugitive	None
Truck loading of purity products rated at ~110.0 MM gallons/year	PP (Loading) ^C [TL-1 through TL-3]	Fugitive	Pressurized Loading
Amine gas sweetening unit	Amine gas sweetening unit	E	Acid Gas Injection Well or Flare
FUGKKK (subject to NSPS KKK)	FUGKKK ^C [FUG2]	Fugitive VOC	LDAR Program
FUGOOOO (subject to NSPS OOOO)	FUGOOOO ^C [FUG5]	Fugitive VOC	LDAR Program
FUG (exempt from NSPS KKK/OOOO)	FUG ^C [FUG1]	Fugitive VOC	None

^A Bracketed text is the on-site unit identification.

^B The potential to emit for an emergency stationary reciprocating internal combustion engine (RICE) is based on operating no more hours per year than is allowed by the applicable subpart (40 CFR 63, Subpart ZZZZ) except for emergency situations. For engines to be considered emergency stationary RICE under the RICE rules, engine operations must comply with non-emergency operating hour limits as specified in the applicable subpart. There is no limit on the use of an emergency stationary RICE in emergency situations [40 CFR 63, Subpart ZZZZ, §63.6640(f)].

^C Insignificant or fugitive emission source (no specific emission limit).

^D The regenerator vent/still vent vapors are routed to EU 1 (Hot oil) from EU 2 (Dehy). The flash tank vent is routed to the plant inlet gas stream for reprocessing. Emissions are controlled through recirculation rather than a dedicated control device.

^E Acid gas from the amine gas sweetening unit is directed to the acid gas injection well. In the event of maintenance or a malfunction, the acid gas will be directed to the flare, EU 1 (Flare).

2. Applicable Standards, Restrictions and Miscellaneous Conditions:

A. Fuel Restrictions:

- 1) All emission units except 1 (Flare), 1 (Hot oil) and 2 (Glycol) shall be operated using only gaseous fuel containing no more than 2.0 grains of sulfur per 100 standard cubic feet. This fuel restriction ensures compliance with NDAC 33.1-15-06-01.2.

- 2) 1 (Hot oil) shall be operated using only gaseous fuel containing no more than 2.0 grains of sulfur per 100 standard cubic feet and/or regenerator vent/still vent vapors from EU 2 (Dehy). This fuel restriction ensures compliance with NDAC 33.1-15-06-01.2.

Applicable Requirements: Air Construction Permit (ACP)-17137 v1.1 & NDAC 33.1-15-14-06.5.b(1)

- B. The TEG dehydration unit [EU 2 (Dehy)] regenerator vent/still vent vapors are routed to EU 1 (Hot oil) to be used as fuel and the flash tank vapors shall be routed to the plant inlet gas stream for reprocessing.

Applicable Requirements: NDAC 33.1-15-14-06.5.a(3)(a) & NDAC 33.1-15-14-06.5.b(1)

C. **Flaring Restrictions:**

- 1) When it is necessary to operate the flare, EU 1 (Flare), during an emergency, malfunction or maintenance, all precautions shall be taken to minimize emissions and maintain compliance with the applicable ambient air quality standards as outlined in NDAC 33.1-15-02 and the opacity standard of 20% not to exceed 60% for more than one six-minute period per hour.
- 2) The stack height for the flare shall be at least 130 feet above ground level.
- 3) Processing equipment at the facility shall be operated in such a manner to minimize flaring as much as possible. Operations at the facility must be in accordance with the application for permit revision dated April 11, 2002, which specifies the following:
 - a) Acid gas injection replaces the sulfur recovery unit.
 - b) Operation of the CEM has ceased.
- 4) Flaring may also be used for maintenance and combustion of normal processes including:
 - a) Maintenance on the acid gas injection compressors and miscellaneous maintenance related blowdowns.
 - b) Combustion of the TEG flash gas.
 - c) Combustion of residue purge gas.
 - d) Daily backwashing of the amine filter into the backwash accumulator and then to the flare.
 - e) Potential equipment leaks from relief valves in the closed position that are routed to the flare.

- f) During maintenance of the acid gas injection well, the permittee will reduce the flow of high H₂S gas to the plant, if necessary, to remain within the SO₂ lb/hr emission limit for the flare. To the extent practicable, this maintenance will be planned to occur during planned plant shutdowns to minimize emissions.
- 5) The backup acid gas compressor will be maintained to help ensure its reliability when needed. Note: The acid gas compressor is electric and, therefore, not identified as an emission unit in the Condition 1 table.

Applicable Requirements: ACP-17137 v1.1 & NDAC 33.1-15-14-06.5.b(1)

D. **New Source Performance Standards (NSPS):** The permittee shall comply with all applicable requirements of the following NDAC 33.1-15-12-02 and 40 CFR 60 subparts in addition to complying with Subpart A - General Provisions.

- 1) Subpart Dc - Standards of Performance for Small Industrial Commercial-Institutional Steam Generating Units recordkeeping and reporting requirements [EU 4 (Hot Oil)].
- 2) Subpart KKK - Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants (EU FUGKKK).
 - a) 40 CFR 60.18, General Control Device Requirements applies to EU 1 (Flare) when FUGKKK component potential leak emissions are directed to EU 1 (Flare).
- 3) Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution for which Construction, Modification or Reconstruction Commenced after August 23, 2011 and on or before September 18, 2015.

Applicable Requirements: NDAC 33.1-15-12-02, Subparts A, Dc, KKK and OOOO

E. **Maximum Achievable Control Technology (MACT):** The permittee shall comply with all applicable requirements of the following NDAC 33.1-15-22-03 and 40 CFR 63 subparts in addition to complying with Subpart A - General Provisions.

- 1) Subpart HH - National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities [EU 2 (Dehy)]. The North Dakota Department of Environmental Quality has not adopted the area source provisions of this subpart. Please send all documentation to EPA at the following address.

U.S. EPA Region 8
1595 Wynkoop Street
Mail Code 8ENF-AT
Denver, CO 80202-1129

- 2) Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines [EU 1 (Gen)]. The North Dakota Department

of Environmental Quality has not adopted the area source provisions of this subpart. Please send all documentation to EPA at the address in Condition No. 2.E.1.

Applicable Requirements: NDAC 33.1-15-22-03, Subpart A, 40 CFR 63, Subparts HH and ZZZZ

F. **Like-Kind Engine Replacement:** This permit allows the permittee to replace the existing engine(s) with a like-kind engine. Replacement is subject to the following conditions.

- 1) The Department must be notified within 10 days after change-out of the engine.
- 2) The replacement engine shall operate in the same manner, provide no significant increase in throughput and have equal or less emissions than the engine it is replacing.
- 3) The date of manufacture of the replacement engine must be included in the notification. The facility must comply with any applicable federal standards (e.g. NSPS, NESHAP, MACT) triggered by the replacement.
- 4) The replacement engine is subject to the same state emission limits as the existing engine in addition to any NSPS or MACT emission limit that is applicable.

Applicable Requirement: NDAC 33.1-15-14-06.5.b(1)

3. Emission Unit Limits:

Emission Unit Description	EU	EP	Pollutant/Parameter	Emission Limit	NDAC Applicable Requirement
Regeneration heater	1 (Reg)	1	Opacity	20% ^A	33.1-15-03-02
Regeneration heater	2 (Reg)	2	Opacity	20% ^A	33.1-15-03-02
Regeneration heater	3 (Reg)	3	Opacity	20% ^A	33.1-15-03-02
Regeneration heater	4 (Reg)	22	Opacity	20% ^A	33.1-15-03-02
Hot oil heater	1 (Hot oil)	4A, 4B	Opacity	20% ^A	33.1-15-03-02
Hot oil heater	2 (Hot oil)	5	Opacity	20% ^A	33.1-15-03-02
Hot oil heater	4 (Hot oil)	21	Opacity	20% ^A	33.1-15-03-02 & 33.1-15-12, Subpart Dc
Auxiliary steam boiler	1 (Auxiliary)	7	Opacity	20% ^A	33.1-15-03-02
Auxiliary steam boiler	2 (Auxiliary)	8	Opacity	20% ^A	33.1-15-03-02
Inert gas generator (boiler)	1 (Inert)	9	Opacity	20% ^A	33.1-15-03-02
Inert gas generator (boiler)	2 (Inert)	10	Opacity	20% ^A	33.1-15-03-02
Caterpillar emergency generator engine	1 (Gen)	11	Opacity	20% ^A	33.1-15-03-02

Emission Unit Description	EU	EP	Pollutant/Parameter	Emission Limit	NDAC Applicable Requirement
Acid gas/process/emergency flare	1 (Flare)	13	SO ₂	14,730 lb/hr ^B (1-hr average)	33.1-15-06-01.2
			Opacity	20% ^C	33.1-15-03-02.1 & 33.15-15-12, Subpart KKK
TEG dehydrator	2 (Dehy)	4A, 4B Plant inlet	Benzene	<0.99 tpy [total for all EU 2 (Dehy) emission points]	33.1-15-14-06.5 & 33.1-15-22, Subpart HH
Glycol regenerator	2 (Glycol)	17	Opacity	20% ^A	33.1-15-03-02
Steam boiler	1 (Boiler)	18	Opacity	20% ^A	33.1-15-03-02
FUGKKK	FUGKKK (Subject to KKK)	Fugitive VOC	Equipment Leaks of VOC	See Cond. 3	33.1-15-12, Subpart OOOO
FUGOOOO	FUGOOOO (Subject to OOOO)	Fugitive VOC	Equipment Leaks of VOC	See Cond. 3	33.1-15-12 Subpart KKK

^A 40% opacity is permissible for not more than one six-minute period per hour.

^B The amount of sweet (residue) gas to be added when flaring acid gas is 5.0 times the acid gas volume.

^C 60% opacity is permissible for not more than one six-minute period per hour; applies at all times. FUGKKK component potential leak emissions that are directed to EU 1 (Flare) shall comply with the requirements of §60.18: 0% opacity, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

4. Monitoring Requirements and Conditions:

A. Requirements:

Emission Unit Description	EU	Pollutant/Parameter	Monitoring Requirement (Method)	Condition Number	NDAC Applicable Requirement
Regeneration heater	1 (Reg)	Opacity	Recordkeeping	4.B.1	33.1-15-14-06.5.a(3)(a)
Regeneration heater	2 (Reg)	Opacity	Recordkeeping	4.B.1	33.1-15-14-06.5.a(3)(a)
Regeneration heater	3 (Reg)	Opacity	Recordkeeping	4.B.1	33.1-15-14-06.5.a(3)(a)
Regeneration heater	4 (Reg)	Opacity	Recordkeeping	4.B.1	33.1-14-14-06.5.a(3)(a)
Hot oil heater	1 (Hot oil)	Opacity	Recordkeeping	4.B.1	33.1-15-14-06.5.a(3)(a)
Hot oil heater	2 (Hot oil)	Opacity	Recordkeeping	4.B.1	33.1-15-14-06.5.a(3)(a)
Hot oil heater	4 (Hot oil)	Opacity	Recordkeeping	4.B.1	33.1-15-12, Subpart Dc
Auxiliary steam boiler	1 (Auxiliary)	Opacity	Recordkeeping	4.B.1	33.1-15-14-06.5.a(3)(a)
Auxiliary steam boiler	2 (Auxiliary)	Opacity	Recordkeeping	4.B.1	33.1-15-14-06.5.a(3)(a)

Emission Unit Description	EU	Pollutant/ Parameter	Monitoring Requirement (Method)	Condition Number	NDAC Applicable Requirement
Inert gas generator (boiler)	1 (Inert)	Opacity	Recordkeeping	4.B.1	33.1-15-14-06.5.a(3)(a)
Inert gas generator (boiler)	2 (Inert)	Opacity	Recordkeeping	4.B.1	33.1-15-14-06.5.a(3)(a)
Caterpillar emergency generator engine	1 (Gen)	Opacity	Recordkeeping	4.B.1	33.1-15-14-06.5.a(3)(a)
		Operating Hours	Recordkeeping	4.B.4	33.1-15-22-03, Subpart ZZZZ
Acid gas/process/emergency flare	1 (Flare)	SO ₂	Calculation	4.B.2	33.1-15-14-06.5.a(3)(a)
		Opacity	Visible Emissions Evaluation	4.B.2	33.1-15-14-06.5.a(3)(a)
TEG dehydrator	2 (Dehy)	Benzene	Recordkeeping	4.B.3 & 4.C.6	33.1-15-22, Subpart HH
Glycol regenerator	2 (Glycol)	Opacity	Recordkeeping	4.B.1	33.1-15-14-06.5.a(3)(a) & 33.1-15-22-03, Subpart HH
Steam boiler	1 (Boiler)	Opacity	Recordkeeping	4.B.1	33.1-15-14-06.5.a(3)(a)
FUGKKK	FUGKKK (Subject to KKK)	VOC	LDAR Program	4.C.3	33.1-15-12-02, Subpart KKK
FUGOOOO	FUGOOOO (Subject to OOOO)	VOC	LDAR Program	4.B.5 & 4.C.4	33.1-15-12-02, Subpart OOOO

B. Monitoring Conditions:

- 1) For purposes of compliance monitoring, burning of gaseous fuel as outlined in Condition 2.A, shall be considered credible evidence of compliance with the opacity limit. However, results from tests conducted in accordance with the test methods in 40 CFR 50, 51, 60, 61, or 75 will take precedence over burning of gaseous fuel as outlined in Condition 2.A, for evidence of compliance or noncompliance with any applicable opacity, particulate and SO₂ emission limit, in the event of enforcement action.
- 2) Flaring:
 - a) The presence of a flame shall be monitored using a thermocouple or any other equivalent device approved by the Department.
 - b) During each occurrence of acid gas flaring, the permittee shall calculate and record the SO₂ emission rate (lb/hr) based on the H₂S content and amount of acid gas flared, and record the amount of fuel gas added. Emissions from emergency flaring

will be differentiated from other flaring (process, scheduled maintenance, etc.) when reported on the Annual Emission Inventory Report. Any calculated exceedances of the SO₂ emissions rate for the flare shall be reported to the Department within 10 working days.

- c) If the flaring lasts longer than 24 hours, the permittee shall conduct a formal visible emissions evaluation of the flare to determine if the emissions are in compliance with the applicable opacity standard. Opacity readings shall consist of three consecutive six-minute periods per day of flaring using EPA Reference Method 9 and conducted by a certified visible emissions reader.
 - 3) Benzene emissions from the TEG dehydration unit [EU 2 (Dehy)] still vent and flash tank shall be determined at least annually using average glycol circulation rate, average gas process rate, and GRI-GLYCalc emissions model, Version 3.0 or equivalent. In accordance with 40 CFR 63, Subpart HH, records of benzene emissions shall be kept to demonstrate and maintain exemption from MACT control requirements.
 - 4) Engine:
 - a) A non-resettable hour meter shall be installed on the emergency engine to ensure maintenance requirements are being performed as required per 40 CFR 63, Subpart ZZZZ.
 - 1] Maintenance requirements include but may not be limited to: change oil and filter or analyze oil every 500 hours of operation or annually; inspect spark plugs every 1,000 hours of operation or annually; and inspect hoses and belts every 500 hours of operation or annually whichever comes first, and replace as necessary.
 - b) A log shall be kept of the total hours of operation on a calendar year basis for the engine. Records shall be maintained to differentiate annual emergency vs. non-emergency/maintenance/etc. hours of operation.
 - 5) For all equipment subject to the standard, the permittee shall comply with the inspection, monitoring and maintenance requirements of 40 CFR 60, Subpart OOOO, §60.5400, as applicable.
- C. In addition to the monitoring outlined in Conditions 4.A and 4.B, monitoring shall be in accordance with the following requirements of the North Dakota Air Pollution Control Rules (NDAC) 33.1-15-12 and 33.1-15-22 and 40 CFR 63, as applicable.
- 1) NDAC 33.1-15-12-02, Subpart A, §60.13, Monitoring Requirements
 - 2) NDAC 33.1-15-12-02, Subpart Dc, §60.46c and §60.47c, Emission Monitoring
 - 3) NDAC 33.1-15-12-02, Subpart KKK, §60.632, Standards

- 4) NDAC 33.1-15-12-02, Subpart OOOO, §60.5415, §60.5416, and §60.5417, Continuous Compliance and Monitoring Requirements
- 5) NDAC 33.1-15-22-03, Subpart A, §63.8, Monitoring Requirements
- 6) 40 CFR 63, Subpart HH, §63.773, Monitoring Requirements

Applicable Requirements: NDAC 33.1-15-12, NDAC 33.1-15-22 and 40 CFR 63, Subpart HH

5. Recordkeeping Requirements:

A. The permittee shall maintain compliance monitoring records as outlined in the Monitoring Records table that include the following information.

- 1) The date, place (as defined in the permit) and time of sampling or measurement.
- 2) The date(s) testing was performed.
- 3) The company, entity, or person that performed the testing.
- 4) The testing techniques or methods used.
- 5) The results of such testing.
- 6) The operating conditions that existed at the time of sampling or measurement.

Applicable Requirement: NDAC 33.1-15-14-06.5.a(3)(b)[1]

Monitoring Records

Emission Unit Description	EU	Pollutant/ Parameter	Compliance Monitoring Record
Regeneration heater	1 (Reg)	Opacity	Type of Fuel Usage Data
Regeneration heater	2 (Reg)	Opacity	Type of Fuel Usage Data
Regeneration heater	3 (Reg)	Opacity	Type of Fuel Usage Data
Regeneration heat	4 (Reg)	Opacity	Type of Fuel Usage Data
Hot oil heater	1 (Hot oil)	Opacity	Type of Fuel Usage Data
Hot oil heater	2 (Hot oil)	Opacity	Type of Fuel Usage Data
Hot oil heater	4 (Hot oil)	Opacity	Type of Fuel Usage Data & Heater Rating per NDAC 33.1-15-12, Subpart Dc
Auxiliary steam boiler	1 (Auxiliary)	Opacity	Type of Fuel Usage Data
Auxiliary steam boiler	2 (Auxiliary)	Opacity	Type of Fuel Usage Data
Inert gas generator (boiler)	1 (Inert)	Opacity	Type of Fuel Usage Data
Inert gas generator (boiler)	2 (Inert)	Opacity	Type of Fuel Usage Data

Emission Unit Description	EU	Pollutant/ Parameter	Compliance Monitoring Record
Caterpillar emergency generator engine	1 (Gen)	VOC Opacity Operating Hours	Rod Packing Monitoring Data Type of Fuel Usage Data Hours of Operation Data
Acid gas/process/emergency flare	1 (Flare)	SO ₂ Opacity	Calculation Data - H ₂ S Content & Amount of Acid Gas Flared Visible Emissions Evaluation Data
TEG dehydrator	2 (Dehy)	Benzene	Benzene Emissions & Calculation Data
Glycol regenerator	2 (Glycol)	Opacity	Type of Fuel Usage Data
Steam boiler 1	1 (Boiler)	Opacity	Type of Fuel Usage Data
FUGKKK	FUGKKK (Subject to KKK)	LDAR Records	LDAR Inspection, Monitoring & Maintenance Records Data
FUGOOOO	FUGOOOO (Subject to OOOO)	LDAR Records	LDAR Inspection, Monitoring & Maintenance Records Data

B. In addition to requirements outlined in Condition 5.A, recordkeeping shall be in accordance with the following requirements of NDAC 33.1-15-12 and 33.1-15-22 and 40 CFR 63, as applicable:

1) NDAC 33.1-15-12:

- a) Subpart A, §60.7, Notification and Recordkeeping
- b) Subpart Dc, §60.48c, Reporting and Recordkeeping Requirements
- c) Subpart KKK, §60.635, Recordkeeping Requirements
- d) Subpart OOOO, §60.5420 and §60.5421, Notification, Reporting, and Recordkeeping Requirements and Additional Recordkeeping Requirements

2) NDAC 33.1-15-22 and 40 CFR 63:

- a) Subpart A, §63.10, Recordkeeping and Reporting Requirements
- b) Subpart HH, §63.774, Recordkeeping Requirements

- c) Subpart ZZZZ, §63.6655 and §63.6660, Notification, Reports and Records

Applicable Requirements: NDAC 33.1-15-12, NDAC 33.1-15-22 and 40 CFR 63, Subparts HH and ZZZZ

- C. The permittee shall retain records of all required monitoring data and support information for a period of at least five years from the date of the monitoring sampling, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings/computer printouts of continuous monitoring instrumentation, and copies of all reports required by the permit.

Applicable Requirement: NDAC 33.1-15-14-06.5.a(3)(b)[2]

6. **Reporting:**

- A. Reporting shall be in accordance with the following requirements of NDAC 33.1-15-12 and 33.1-15-22 and 40 CFR 63, as applicable.

1) NDAC 33.1-15-12:

- a) Subpart A, §60.7, Notification and Recordkeeping
- b) Subpart Dc, §60.48c, Reporting and Recordkeeping Requirements
- c) Subpart KKK, §60.636, Reporting Requirements
- d) Subpart OOOO, §60.5420, §60.5421, §60.5422 and §60.5423, Notification, Reporting, and Recordkeeping Requirements and Additional Reporting Requirements

2) NDAC 33.1-15-22 and 40 CFR 63:

- a) Subpart A, §63.10, Recordkeeping and Reporting Requirements
- b) Subpart HH, §63.775, Reporting Requirements
- c) Subpart ZZZZ, §63.6645, §63.6650 and §63.6660, Notification, Reports and Records

Applicable Requirements: NDAC 33.1-15-12, NDAC 33.1-15-22 and 40 CFR 63, Subparts HH and ZZZZ

- B. The permittee shall submit a semi-annual monitoring report for all monitoring records required under Condition 5 in a format provided or approved by the Department. All instances of deviations from the permit must be identified in the report. A monitoring report shall be submitted within 45 days after June 30 and December 31 of each year.

- 1) The semi-annual monitoring report shall also include the following information regarding each acid gas flaring incident:
 - a) Reason for flaring of acid gas.
 - b) Date and length of time that acid gas flaring occurred.
 - c) Amount of acid gas flared (ft³) and H₂S content.
 - d) Calculated average SO₂ lb/hr.

Applicable Requirements: NDAC 33.1-15-14-06.5.a(3)(c)[1] and [2]

- C. The permittee shall submit an annual compliance certification report in accordance with NDAC 33.1-15-14-06.5.c(5) within 45 days after December 31 of each year in a format provided or approved by the Department.

Applicable Requirement: NDAC 33.1-15-14-06.5.c(5)

- D. For emission units where the method of compliance monitoring is demonstrated by an EPA Test Method or a portable analyzer test, the test report shall be submitted to the Department within 60 days after completion of the test.

Applicable Requirement: NDAC 33.1-15-14-06.5.a(6)(e)

- E. The permittee shall submit an annual emission inventory report in a format provided or approved by the Department. This report shall be submitted by March 15 of each year. Insignificant units/activities listed in this permit do not need to be included in the report.

Applicable Requirements: NDAC 33.1-15-14-06.5.a(7) and NDAC 33.1-15-23-04

7. Facility Wide Operating Conditions:

A. Ambient Air Quality Standards:

- 1) Particulate and gases. The permittee shall not emit air contaminants in such a manner or amount that would violate the standards of ambient air quality listed in Table 1 of NDAC 33.1-15-02, external to buildings, to which the general public has access.
- 2) Radioactive substances. The permittee shall not release into the ambient air any radioactive substances exceeding the concentrations specified in NDAC 33.1-10.
- 3) Other air contaminants. The permittee shall not emit any other air contaminants in concentrations that would be injurious to human health or well-being or unreasonably interfere with the enjoyment of property or that would injure plant or animal life.

- 4) **Disclaimer.** Nothing in any other part or section of this permit may in any manner be construed as authorizing or legalizing the emission of air contaminants in such manner that would violate the standards in Paragraphs 1), 2) and 3) of this condition.

Applicable Requirements: NDAC 33.1-15-02-04 and 40 CFR 50.1(e)

- B. **Fugitive Emissions:** The release of fugitive emissions shall comply with the applicable requirements in NDAC 33.1-15-17.

Applicable Requirement: NDAC 33.1-15-17

- C. **Open Burning:** The permittee may not cause, conduct, or permit open burning of refuse, trade waste, or other combustible material, except as provided for in Section 33.1-15-04-02 and may not conduct, cause, or permit the conduct of a salvage operation by open burning. Any permissible open burning under NDAC 33.1-15-04-02 must comply with the requirements of that section.

Applicable Requirement: NDAC 33.1-15-04

- D. **Asbestos Renovation or Demolition:** Any asbestos renovation or demolition at the facility shall comply with emission standard for asbestos in NDAC 33.1-15-13.

Applicable Requirement: NDAC 33.1-15-13-02

- E. **Requirements for Organic Compounds Gas Disposal:**

- 1) Any organic compounds, gases and vapors which are generated as wastes as the result of storage, refining or processing operations and which contain hydrogen sulfide shall be incinerated, flared or treated in an equally effective manner before being released into the ambient air.
- 2) Each flare must be equipped and operated with an automatic ignitor or a continuous burning pilot.

Applicable Requirement: NDAC 33.1-15-07-02

- F. **Rotating Pumps and Compressors:** All rotating pumps and compressors handling volatile organic compounds must be equipped and operated with properly maintained seals designed for their specific product service and operating conditions.

Applicable Requirement: NDAC 33.1-15-07-01.5

- G. **Shutdowns/Malfunction/Continuous Emission Monitoring System Failure:**

- 1) **Maintenance Shutdowns.** In the case of shutdown of air pollution control equipment for necessary scheduled maintenance, the intent to shut down such equipment shall be reported to the Department at least 24 hours prior to the planned shutdown provided that the air

contaminating source will be operated while the control equipment is not in service. Such prior notice shall include the following:

- a) Identification of the specific facility to be taken out of service as well as its location and permit number.
- b) The expected length of time that the air pollution control equipment will be out of service.
- c) The nature and estimated quantity of emissions of air pollutants likely to be emitted during the shutdown period.
- d) Measures, such as the use of off-shift labor and equipment, that will be taken to minimize the length of the shutdown period.
- e) The reasons that it would be impossible or impractical to shut down the source operation during the maintenance period.
- f) Nothing in this subsection shall in any manner be construed as authorizing or legalizing the emission of air contaminants in excess of the rate allowed by this article or a permit issued pursuant to this article.

Applicable Requirement: NDAC 33.1-15-01-13.1

2) Malfunctions.

- a) When a malfunction in any installation occurs that can be expected to last longer than 24 hours and cause the emission of air contaminants in violation of this article or other applicable rules and regulations, the person responsible for such installation shall notify the Department of such malfunction as soon as possible during normal working hours. The notification must contain a statement giving all pertinent facts, including the estimated duration of the breakdown. The Department shall be notified when the condition causing the malfunction has been corrected.
- b) Immediate notification to the Department is required for any malfunction that would threaten health or welfare or pose an imminent danger. During normal working hours the Department can be contacted at 701-328-5188. After hours the Department can be contacted through the 24-hour state radio emergency number 1-800-472-2121. If calling from out of state, the 24-hour number is 701-328-9921.
- c) Unavoidable Malfunction. The owner or operator of a source who believes any excess emissions resulted from an unavoidable malfunction shall submit a written report to the Department which includes evidence that:

- [1] The excess emissions were caused by a sudden, unavoidable breakdown of technology that was beyond the reasonable control of the owner or operator.

- [2] The excess emissions could not have been avoided by better operation and maintenance, did not stem from an activity or event that could have been foreseen and avoided, or planned for.
- [3] To the extent practicable, the source maintained and operated the air pollution control equipment and process equipment in a manner consistent with good practice for minimizing emissions, including minimizing any bypass emissions.
- [4] Any necessary repairs were made as quickly as practicable, using off-shift labor and overtime as needed and possible.
- [5] All practicable steps were taken to minimize the potential impact of the excess emissions on ambient air quality.
- [6] The excess emissions are not part of a recurring pattern that may have been caused by inadequate operation or maintenance, or inadequate design of the malfunctioning equipment.

The report shall be submitted within 30 days of the end of the calendar quarter in which the malfunction occurred or within 30 days of a written request by the Department, whichever is sooner.

The burden of proof is on the owner or operator of the source to provide sufficient information to demonstrate that an unavoidable equipment malfunction occurred. The Department may elect not to pursue enforcement action after considering whether excess emissions resulted from an unavoidable equipment malfunction. The Department will evaluate, on a case-by-case basis, the information submitted by the owner or operator to determine whether to pursue enforcement action.

Applicable Requirement: NDAC 33.1-15-01-13.2

- 3) Continuous Emission Monitoring System Failures. When a failure of a continuous emission monitoring system occurs, an alternative method for measuring or estimating emissions must be undertaken as soon as possible. The owner or operator of a source that uses an alternative method shall have the burden of demonstrating that the method is accurate. Timely repair of the emission monitoring system must be made. The provisions of this subsection do not apply to sources that are subject to monitoring requirements in Chapter 33.1-15-21 (40 CFR 75, Acid Rain Program).

Applicable Requirement: NDAC 33.1-15-01-13.3

H. **Noncompliance Due to an Emergency:** The permittee may seek to establish that noncompliance with a technology-based emission limitation under this permit was due to an emergency. To do

so, the permittee shall demonstrate the affirmative defense of emergency through properly signed, contemporaneous operating logs, or other relevant evidence that:

- 1) An emergency occurred, and that the permittee can identify the cause(s) of the emergency;
- 2) The permitted facility was at the time being properly operated;
- 3) During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards, or other requirements in this permit; and
- 4) The permittee submitted notice of the emergency to the Department within one working day of the time when emission limitations were exceeded longer than 24-hours due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. Those emergencies not reported within one working day, as well as those that were, will be included in the semi-annual report.

In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

Technology-based emission limits are those established on the basis of emission reductions achievable with various control measures or process changes (e.g., a New Source Performance Standard) rather than those established to attain a health-based air quality standard.

An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of this source, including acts of God, which requires immediate corrective action to restore normal operation, and that causes this source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

Applicable Requirement: NDAC 33.1-15-14-06.5.g

- I. **Air Pollution from Internal Combustion Engines:** The permittee shall comply with all applicable requirements of NDAC 33.1-15-08-01 – Internal Combustion Engine Emissions Restricted.

Applicable Requirement: NDAC 33.1-15-08-01

- J. **Prohibition of Air Pollution:**

- 1) The permittee shall not permit or cause air pollution, as defined in NDAC 33.1-15-01-04.

- 2) Nothing in any other part of this permit or any other regulation relating to air pollution shall in any manner be construed as authorizing or legalizing the creation or maintenance of air pollution.

Applicable Requirement: NDAC 33.1-15-01-15

K. Performance Tests:

- 1) The Department may reasonably require the permittee to make or have made tests, at a reasonable time or interval, to determine the emission of air contaminants from any source, for the purpose of determining whether the permittee is in violation of any standard or to satisfy other requirements of NDCC 23.1-06. All tests shall be made, and the results calculated in accordance with test procedures approved or specified by the Department including the North Dakota Department of Environmental Quality Emission Testing Guideline. All tests shall be conducted by reputable, qualified personnel. The Department shall be given a copy of the test results in writing and signed by the person responsible for the tests.
- 2) The Department may conduct tests of emissions of air contaminants from any source. Upon request of the Department, the permittee shall provide necessary and adequate access into stacks or ducts and such other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices, as may be necessary for proper determination of the emission of air contaminants.

Applicable Requirement: NDAC 33.1-15-01-12

- 3) Except for sources subject to 40 CFR 63, the permittee shall notify the Department by submitting a Proposed Test Plan, or its equivalent, at least 30 calendar days in advance of any tests of emissions of air contaminants required by the Department. The permittee shall notify the Department at least 60 calendar days in advance of any performance testing required under 40 CFR 63, unless otherwise specified by the subpart. If the permittee is unable to conduct the performance test on the scheduled date, the permittee shall notify the Department as soon as practicable when conditions warrant and shall coordinate a new test date with the Department.

Failure to give the proper notification may prevent the Department from observing the test. If the Department is unable to observe the test because of improper notification, the test results may be rejected.

Applicable Requirements: NDAC 33.1-15-14-06.5.a(3)(a), NDAC 33.1-15-12-02 Subpart A (40 CFR 60.8), NDAC 33.1-15-13-01.2 Subpart A (40 CFR 61.13), NDAC 33.1-15-22-03 Subpart A (40 CFR 63.7)

- L. Pesticide Use and Disposal:** Any use of a pesticide or disposal of surplus pesticides and empty pesticide containers shall comply with the requirements in NDAC 33.1-15-10.

Applicable Requirements: NDAC 33.1-15-10-01 and NDAC 33.1-15-10-02

- M. **Air Pollution Emergency Episodes:** When an air pollution emergency episode is declared by the Department, the permittee shall comply with the requirements in NDAC 33.1-15-11.

Applicable Requirements: NDAC 33.1-15-11-01 through NDAC 33.1-15-11-04

- N. **Stratospheric Ozone Protection:** The permittee shall comply with any applicable standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for MVACs in Subpart B:

- 1) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to Section 82.156.
- 2) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to Section 82.158.
- 3) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to Section 82.161.
- 4) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to Section 82.156.

Applicable Requirement: 40 CFR 82

- O. **Chemical Accident Prevention:** The permittee shall comply with all applicable requirements of Chemical Accident Prevention pursuant to 40 CFR 68. The permittee shall comply with the requirements of this part no later than the latest of the following dates:

- 1) Three years after the date on which a regulated substance is first listed under this part; or
- 2) The date on which a regulated substance is first present above a threshold quantity in a process.

Applicable Requirement: 40 CFR 68

- P. **Air Pollution Control Equipment:** The permittee shall maintain and operate air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. The manufacturer's recommended Operations and Maintenance (O&M) procedures, or a site-specific O&M procedure developed from the manufacturer's recommended O&M procedures, shall be followed to assure proper operation and maintenance of the equipment. The permittee shall have the O&M procedures available onsite and provide the Department with a copy when requested.

Applicable Requirement: NDAC 33.1-15-14-06.5.b(1)

- Q. **Prevention of Significant Deterioration of Air Quality** (40 CFR 52.21 as incorporated by NDAC Chapter 33.1-15-15): If this facility is classified as a major stationary source under the Prevention of Significant Deterioration of Air Quality (PSD) rules, a Permit to Construct must be obtained from the Department for any project which meets the definition of a "major modification" under 40 CFR 52.21(b)(2).

If this facility is classified as a major stationary source under the PSD rules and the permittee elects to use the method specified in 40 CFR 52.21(b)(41)(ii)(a) through (c) for calculating the projected actual emissions of a proposed project, then the permittee shall comply with all applicable requirements of 40 CFR 52.21(r)(6).

Applicable Requirement: NDAC 33.1-15-15-01.2

8. **General Conditions:**

- A. **Annual Fee Payment:** The permittee shall pay an annual fee, for administering and monitoring compliance, which is determined by the actual annual emissions of regulated contaminants from the previous calendar year. The Department will send a notice, identifying the amount of the annual permit fee, to the permittee of each affected installation. The fee is due within 60 days following the date of such notice. Any source that qualifies as a "small business" may petition the Department to reduce or exempt any fee required under this section. Failure to pay the fee in a timely manner or submit a certification for exemption may cause this Department to initiate action to revoke the permit.

Applicable Requirements: NDAC 33.1-15-14-06.5.a(7) and NDAC 33.1-15-23-04

- B. **Permit Renewal and Expiration:** This permit shall be effective from the date of its issuance for a fixed period of five years. The permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least six months, but no more than 18 months, prior to the date of permit expiration. The Department shall approve or disapprove the renewal application within 60 days of receipt. Unless the Department requests additional information or otherwise notifies the applicant of incompleteness, the application shall be deemed complete. For timely and complete renewal applications for which the Department has failed to issue or deny the renewal permit before the expiration date of the previous permit, all terms and conditions of the permit, including any permit shield previously granted shall remain in effect until the renewal permit has been issued or denied. The application for renewal shall include the current permit number, description of any permit revisions and off-permit changes that occurred during the permit term, and any applicable requirements that were promulgated and not incorporated into the permit during the permit term.

Applicable Requirements: NDAC 33.1-15-14-06.4 and NDAC 33.1-15-14-06.6

- C. **Transfer of Ownership or Operation:** This permit may not be transferred except by procedures allowed in Chapter 33.1-15-14 and is to be returned to the Department upon the destruction or change of ownership of the source unit(s), or upon expiration, suspension or revocation of this permit. A change in ownership or operational control of a source is treated as an administrative permit amendment if no other change in the permit is necessary and provided that a written

agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to the Department.

Applicable Requirement: NDAC 33.1-15-14-06.6.d

- D. **Property Rights:** This permit does not convey any property rights of any sort, or any exclusive privilege.

Applicable Requirement: NDAC 33.1-15-14-06.5.a(6)(d)

- E. **Submissions:**

- 1) Reports, test data, monitoring data, notifications, and requests for renewal shall be submitted to the Department using a format provided or approved by the Department. Physical submittals shall be submitted to:

North Dakota Department of Environmental Quality
Division of Air Quality
4201 Normandy Street, 2nd Floor
Bismarck, ND 58503-1324

- 2) Any application form, report or compliance certification submitted shall be certified as being true, accurate, and complete by a responsible official.

Applicable Requirement: NDAC 33.1-15-14-06.4.d

- F. **Right of Entry:** Any duly authorized officer, employee or agent of the North Dakota Department of Environmental Quality may enter and inspect any property, premise or place listed on this permit or where records are kept concerning this permit at any reasonable time for the purpose of ascertaining the state of compliance with this permit and the North Dakota Air Pollution Control Rules. The Department may conduct tests and take samples of air contaminants, fuel, processing material, and other materials which affect or may affect emissions of air contaminants from any source. The Department shall have the right to access and copy any records required by the Department's rules and to inspect monitoring equipment located on the premises.

Applicable Requirements: NDAC 33.1-15-14-06.5.c(2) and NDAC 33.1-15-01-06

- G. **Compliance:** The permittee must comply with all conditions of this permit. Any noncompliance with a federally-enforceable permit condition constitutes a violation of the Federal Clean Air Act. Any noncompliance with any State enforceable condition of this permit constitutes a violation of NDCC Chapter 23.1-06 and NDAC 33.1-15. Violation of any condition of this permit is grounds for enforcement action, for permit termination, revocation and reissuance or modification, or for denial of a permit renewal application. Noncompliance may also be grounds for assessment of penalties under the NDCC 23.1-06. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

Applicable Requirements: NDAC 33.1-15-14-06.5.a(6)(a) and NDAC 33.1-15-14-06.5.a(6)(b)

- H. **Duty to Provide Information:** The permittee shall furnish to the Department, within a reasonable time, any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. This includes instances where an alteration, repair, expansion, or change in method of operation of the source occurs. Upon request, the permittee shall also furnish to the Department copies of records that the permittee is required to keep by this permit, or for information claimed to be confidential, the permittee may furnish such recourse directly to the Department along with a claim of confidentiality. The permittee, upon becoming aware that any relevant facts were omitted, or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information. Items that warrant supplemental information submittal include, but are not limited to, changes in the ambient air boundary and changes in parameters associated with emission points (i.e., stack parameters). The permittee shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete renewal application was submitted but prior to release of a draft permit.

Applicable Requirements: NDAC 33.1-15-14-06.5.a(6)(e), NDAC 33.1-15-14-06.6.b(3) and NDAC 33.1-15-14-06.4.b

- I. **Reopening for Cause:** The Department will reopen and revise this permit as necessary to remedy deficiencies in the following circumstances:

- 1) Additional applicable requirements under the Federal Clean Air Act become applicable to the permittee with a remaining permit term of three or more years. Such a reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the expiration date of this permit.
- 2) The Department or the United States Environmental Protection Agency determines that this permit contains a material mistake or inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.
- 3) The Department or the United States Environmental Protection Agency determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- 4) Reopenings shall not be initiated before a notice of intent to reopen is provided to the permittee by the Department at least 30 days in advance of the date that this permit is to be reopened, except that the Department may provide a shorter time period in the case of an emergency. Proceedings to reopen and issue this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable.

Applicable Requirement: NDAC 33.1-15-14-06.6.f

- J. **Permit Changes:** The permit may be modified, revoked, reopened, and reissued or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and

reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Applicable Requirement: NDAC 33.1-15-14-06.5.a(6)(c)

K. **Off-Permit Changes:** A permit revision is not required for changes that are not addressed or prohibited by this permit, provided the following conditions are met:

- 1) No such change may violate any term or condition of this permit.
- 2) Each change must comply with all applicable requirements.
- 3) Changes under this provision may not include changes or activities subject to any requirement under Title IV or that are modifications under any provision of Title I of the Federal Clean Air Act.
- 4) A Permit to Construct under NDAC 33.1-15-14-02 has been issued, if required.
- 5) Before the permit change is made, the permittee must provide written notice to both the Department and Air Program (8P-AR), Office of Partnerships & Regulatory Assistance, US EPA Region 8, 1595 Wynkoop Street, Denver, CO 80202-1129, except for changes that qualify as insignificant activities in Section 33.1-15-14-06. This notice shall describe each change, the date of the change, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result.
- 6) The permittee shall record all changes that result in emissions of any regulated air pollutant subject to any applicable requirement not otherwise regulated under this permit, and the emissions resulting from those changes. The record shall reside at the permittee's facility.

Applicable Requirement: NDAC 33.1-15-14-06.6.b(3)

L. **Administrative Permit Amendments:** This permit may be revised through an administrative permit amendment, if the revision to this permit accomplishes one of the following:

- 1) Corrects typographical errors.
- 2) Identifies a change in the name, address or phone number of any person identified in this permit or provides a similar minor administrative change at the source.
- 3) Requires more frequent monitoring or reporting by the permittee.
- 4) Allows for a change in ownership or operational control of the source where the Department determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the Department.
- 5) Incorporates into the Title V permit the requirements from a Permit to Construct when the review was substantially equivalent to Title V requirements for permit issuance, renewal, reopenings, revisions and permit review by the United States Environmental Protection

Agency and affected state review, that would be applicable to the change if it were subject to review as a permit modification and compliance requirements substantially equivalent to Title V requirements for permit content were contained in the Permit to Construct.

- 6) Incorporates any other type of change which the Administrator of the United States Environmental Protection Agency has approved as being an administrative permit amendment as part of the Department's approved Title V operating permit program.

Applicable Requirement: NDAC 33.1-15-14-06.6.d

M. **Minor Permit Modification:** This permit may be revised by a minor permit modification, if the proposed permit modification meets the following requirements:

- 1) Does not violate any applicable requirement.
- 2) Does not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in this permit.
- 3) Does not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis.
- 4) Does not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include a federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I of the Federal Clean Air Act; and alternative emissions limit approved pursuant to regulations promulgated under Section 112(i)(5) of the Federal Clean Air Act.
- 5) Is not a modification under NDAC 33.1-15-12, 33.1-15-13, and 33.1-15-15 or any provision of Title I of the Federal Clean Air Act.
- 6) Is not required to be processed as a significant modification.

Applicable Requirement: NDAC 33.1-15-14-06.6.e(1)

N. **Significant Modifications:**

- 1) Significant modification procedures shall be used for applications requesting permit modifications that do not qualify as minor permit modifications or as administrative amendments. Every significant change in existing monitoring permit terms or conditions and every relaxation of reporting or recordkeeping permit terms or conditions shall be considered significant. Nothing therein shall be construed to preclude the permittee from making changes consistent with this subsection that would render existing permit compliance terms and conditions irrelevant.
- 2) Significant permit modifications shall meet all Title V requirements, including those for applications, public participation, review by affected states, and review by the United

States Environmental Protection Agency, as they apply to permit issuance and permit renewal. The Department shall complete review of significant permit modifications within nine months after receipt of a complete application.

Applicable Requirement: NDAC 33.1-15-14-06.6.e(3)

- O. **Operational Flexibility:** The permittee is allowed to make a limited class of changes within the permitted facility that contravene the specific terms of this permit without applying for a permit revision, provided the changes do not exceed the emissions allowable under this permit, are not Title I modifications and a Permit to Construct is not required. This class of changes does not include changes that would violate applicable requirements; or changes to federally-enforceable permit terms or conditions that are monitoring, recordkeeping, reporting, or compliance certification requirements.

The permittee is required to send a notice to both the Department and Air Program (8P-AR), Office of Partnerships & Regulatory Assistance, US EPA Region 8, 1595 Wynkoop Street, Denver, CO 80202-1129, at least seven days in advance of any change made under this provision. The notice must describe the change, when it will occur and any change in emissions, and identify any permit terms or conditions made inapplicable as a result of the change. The permittee shall attach each notice to its copy of this permit. Any permit shield provided in this permit does not apply to changes made under this provision.

Applicable Requirement: NDAC 33.1-15-14-06.6.b(2)

- P. **Relationship to Other Requirements:** Nothing in this permit shall alter or affect the following:
- 1) The provisions of Section 303 of the Federal Clean Air Act (emergency orders), including the authority of the administrator of the United States Environmental Protection Agency under that section.
 - 2) The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance.
 - 3) The ability of the United States Environmental Protection Agency to obtain information from a source pursuant to Section 114 of the Federal Clean Air Act.
 - 4) Nothing in this permit shall relieve the permittee of the requirement to obtain a Permit to Construct.

Applicable Requirements: NDAC 33.1-15-14-06.3 and NDAC 33.1-15-14-06.5.f(3)(a), (b) and (d)

- Q. **Severability Clause:** The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

Applicable Requirement: NDAC 33.1-15-14-06.5.a(5)

- R. **Circumvention:** The permittee shall not cause or permit the installation or use of any device of any means which conceals or dilutes an emission of air contaminants which would otherwise violate this permit.

Applicable Requirement: NDAC 33.1-15-01-08

9. **State Enforceable Only Conditions (not Federally enforceable):**

- A. **General Odor Restriction:** The permittee shall not discharge into the ambient air any objectionable odorous air contaminant which exceeds the limits established in NDAC 33.1-15-16.

Applicable Requirement: NDAC 33.1-15-16

- B. **Hydrogen Sulfide Restriction:** The permittee shall not discharge into the ambient air hydrogen sulfide (H₂S) in concentrations that would be objectionable on land owned or leased by the complainant or in areas normally accessed by the general public. For the purpose of complaint resolution, two samples with concentrations greater than 0.05 parts per million (50 parts per billion) sampled at least 15 minutes apart within a two-hour period and measured in accordance with Section 33.1-15-16-04 constitute a violation.

Applicable Requirement: NDAC 33.1-15-16-04

ONEOK Rockies Midstream, L.L.C.
Grasslands Gas Plant
Title V Permit to Operate No. AOP-28426 v6.0
(Previously known as T5-O83005, Renewal No. 5, Revision No. 0)
Statement of Basis
(8/5/21)

Facility Background: The ONEOK Rockies Midstream, L.L.C. Grasslands Gas Plant is a 100 MMSCF/day natural gas processing facility that uses expansion refrigeration and compression to process gas from the surrounding fields into methane and ethane gas, propane and butane liquids, and natural gas. The remaining acid gas is compressed and piped to a wellhead located approximately one quarter mile from the plant. The acid gas is then injected into the Dakota Formation located approximately 5,100 feet below the wellhead, which is equipped with H₂S leak detection sensors.

The facility consists of approximately 12 natural gas-fired heaters and boilers each with a nominal capacity of approximately 46×10^6 Btu/hr heat input or less, an 800 bhp natural gas-fired emergency electrical generator engine, an acid gas/process/emergency flare and two liquid storage tanks with capacities of 300 barrels or less each that contain engine oil or amine. There is an amine unit and a 200 barrel methanol storage tank on site with approximately six injection points. There is also a triethylene glycol unit on site which removes excess water from the residue gas.

The Koch Hydrocarbon Company, the original owner, applied for a permit to construct for the McKenzie County Gas Plant (now known as the Grasslands Gas Plant) on October 3, 1979. Prevention of Significant Deterioration and Best Available Control Technology were considered. An interim variance was issued November 19, 1979 and construction began. Construction was completed and operation of various parts of the plant began between September 1980 and March 1981.

Permit to Operate No. O83005 was first issued on September 30, 1983 and then renewed at three year intervals. The initial configuration of the facility included a sulfur recovery unit (SRU), a tail gas incinerator and an SO₂ continuous emission monitor. Several permits to construct were issued due to facility changes that were subsequently reflected by changes to the permit to operate.

Ownership of the facility was transferred from Koch Hydrocarbon to Bear Paw Energy, Inc. (later changed to L.L.C.) in January 1997. On February 10, 1997, the initial Title V Permit to Operate T5-O83005 issued for the facility. That permit reflected the switch from the SRU/tail gas incinerator configuration to the deep well injection/emergency flare operation. The C4-Splitter was installed in 1997-1998 and is one of several process units that are subject to 40 CFR 60, Subpart KKK. T5-O83005 Renewal No. 1 was issued December 26, 2001. PTC07021 (ACP-17137 v1.0), issued July 2, 2007, implemented steps toward increasing plant capacity to a nominal 100×10^6 scfd @ 3.0% H₂S. T5-O83005 Renewal No. 2 (AOP-28426 v3.0) was issued July 24, 2007. Amendment No. 1 to PTC07021 (ACP-17137 v1.1) was issued 6/29/09 and added the regeneration heater, EU 4 (Reg). T5-O83005, Revision No. 1 (AOP-28426 v3.1), a minor modification, was issued September 22, 2009, to incorporate the conditions of ACP-17137 v1.1.

In September of 2011, Bear Paw Energy, L.L.C. was renamed ONEOK Rockies Midstream, L.L.C. (ONEOK).

Renewal No. 3 of T5-O83005 (AOP-28426 v4.0) was issued February 8, 2012 and added the acid gas/process/emergency flare compliance plan and schedule. The compliance plan addressed replacing the acid gas/process/emergency flare to ensure compliance with 40 CFR 60.18 due to FUGKKK potential leak emissions that are directed to EU 1 (Flare). Administrative Revision No. 1 of Renewal No. 3 (AOP-28426 v4.1) was issued May 20, 2015 and reflected the replacement of the acid gas/process/emergency flare and completion of the flare compliance plan. Renewal No. 4 of T5-O83005 (AOP-28426 v5.0), issued February 2, 2017, reflected administrative changes to the permit.

Current Action: On June 21, 2021, the Department received a timely application dated June 21, 2021 from ONEOK for renewal of the Grasslands Gas Plant Title V Permit to Operate AOP-28426. All of the changes in the draft permit are administrative in nature.

The Department proposes to issue Title V Permit to Operate No. AOP-28426 v6.0 after the required 30-day public comment period and subsequent 45-day EPA review period. This statement of basis summarizes the relevant information considered during the renewal of the Title V permit. The legal basis for each permit condition is stated in the draft permit under the heading of "Applicable Requirement."

Applicable Programs/As-Needed Topics:

1. **Title V.** The facility holds a Title V Permit to Operate because potential NO_x, CO and VOC emissions exceed the Title V threshold and because the potential SO₂ emissions from flaring acid gas, when problems prevent deep well injection, may reasonably be considered above 100 tons per year (2020 actual SO₂ was 53 tons). The plant is a minor/area source of HAP emissions.
2. **New Source Performance Standards (NSPS).** The following NDAC 33.1-15-12-02 and 40 CFR 60 subparts apply to the facility.

Subpart A, General Provisions, applies to all source units to which another NSPS subpart applies.

Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units [EU 4 (Hot oil)].

Subpart KKK, Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants applies because it was constructed after January 20, 1984 (actual 1997-1998) [C4-Splitter and FUGKKK].

Subpart OOOO, Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution (centrifugal/reciprocal compressors and FUGOOOO).

Subpart Kb does not apply to the tanks because their capacities are less than 151 cubic meters each.

3. **National Emission Standards for Hazardous Air Pollutants (NESHAP).** No NDAC 33.1-15-13 and 40 CFR 61 subparts apply to the facility, with the possible exception of NDAC 33.1-15-13-02 (40 CFR 61) Subpart M (National Emission Standard for Asbestos) may apply during facility modifications involving asbestos.
4. **NESHAP (MACT).** The following NDAC 33.1-15-22-03 and 40 CFR 63 subparts apply to the facility, which is an area source of Hazardous Air Pollutants (HAP).

Subpart A, General Provisions, applies to all source units to which another MACT subpart applies.

Subpart HH, National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities (affected emission points that either process, upgrade, or store hydrocarbons prior to the point of custody transfer or prior to which the natural gas enters the natural gas transmission and storage source category: the glycol dehydration unit process vent standard applies to each glycol dehydration unit subject to the subpart with an actual annual average natural gas flow rate equal to or greater than 85,000 standard cubic meters per day and with actual average glycol dehydration unit process vent benzene emissions equal to or greater than 0.90 megagrams per year). Grasslands Gas Plant is an area source of HAPs with an actual annual average natural gas flow rate of greater than 85,000 standard cubic meters per day, but both glycol dehydration units are limited to emissions less than 0.90 megagrams per year (0.99 tpy) of benzene. Therefore, the site is not subject to area source requirements of this subpart, but shall track benzene emissions from the process.

Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE) (EU 1 Gen). The Department has not adopted the HAP area source provisions of this subpart; all required reports and documentation are to be sent to EPA Region 8.

5. **Acid Rain.** NDAC 33.1-15-21 (40 CFR 72, 73, 75 and 76) does not apply to the facility since it is not an existing electric utility steam generating plant rated at greater than 25 MWe.
6. **Prevention of Significant Deterioration (PSD).** The facility is not a major source under NDAC 33.1-15-15 (40 CFR 52) because it does not have the potential to emit more than 250 tons of any air contaminant during normal operations. SO₂ emissions may exceed 250 tons (\leq 550 tons per year) during emergency flaring. There are no changes contained in this draft permit that increase potential emissions by a PSD-significant amount. Therefore, this draft permit is not subject to PSD review.

7. **BACT.** Since there are no changes contained in this draft permit that increase potential emissions by a PSD-significant amount, a BACT review is not required for this draft permit.
8. **Gap Filling.** Although the permit does contain gap filling for testing, monitoring or recordkeeping not otherwise required by rule, this draft permit does not contain revisions to previously permitted gap filling. The gap filling conditions are generally identified by the applicable requirement NDAC 33.1-15-14-06.5.a(3)(a).
9. **Streamlining Decisions.** The NDAC 33.1-15-06-01.2 *Restrictions applicable to fuel burning installations* emission limit for sulfur (3.0 lb sulfur per million Btu) was streamlined because the standard ND natural gas fuel restriction for sulfur (2 grains/100 scf) is more stringent.
10. **Compliance Assurance Monitoring (CAM).** Does not apply because there is no add-on air pollution control equipment installed and because adequate monitoring is specified in post-11/15/90 NSPS and MACT subparts.
11. **Permit Shield.** Does not apply because the permit to operate does not contain a permit shield.
12. **New Conditions/Limits.** This draft permit does not include new emission limits. The new conditions reflect applicable subpart requirements clarification. Specific changes are identified in the "Permit Changes by Section" below.
13. **40 CFR 98 - Mandatory Greenhouse Gas Reporting.** This rule requires sources above certain emission thresholds to calculate, monitor, and report greenhouse gas emissions. According to the definition of "applicable requirement" in 40 CFR 70.2, neither Subpart 98, nor Clean Air Act Section 307(d)(1)(V), the CAA authority under which Subpart 98 was promulgated, are listed as applicable requirements for the purpose of Title V permitting. Although the rule is not an applicable requirement under 40 CFR 70, the source is not relieved from the requirement to comply with the rule separately from compliance with their Part 70 operating permit. It is the responsibility of each source to determine applicability to the subpart and to comply, if necessary.

Permit Changes by Section in this Draft Permit:

Note: Administrative changes were made to some sections to update to the current North Dakota (ND) format and to correct errors. These changes may not be specifically addressed below. In addition, the Permit to Operate number and references to Permit to Construct numbers have been updated to accommodate a new database (CERIS-ND).

Cover: Date, permit number and renewal were updated.

Table of Contents: Condition headings, numbering and page numbers were updated accordingly.

1. **Emission Unit Identification:** Emission unit descriptions for several units were clarified and emission unit identifications were updated to provide the on-site naming conventions. Two insignificant tanks were added to the emission units list (EU [USED OIL] and TK-103)
2. **Applicable Standards, Restrictions and Miscellaneous Conditions:** The fuel restrictions were moved to this section with an update to the referenced construction permit number corresponding with CERIS-ND. The flaring conditions and applicable standards were updated to the current North Dakota format. Engine testing was removed for the emergency generator [1(Gen)].
3. **Emission Unit Limits:** The opacity limits/requirements footnote was updated for clarification.
4. **Monitoring Requirements and Conditions:** Applicable standards monitoring was added and/or updated to reflect the current monitoring requirements. Facility-wide annual SO₂ monitoring was removed since the required ten years has passed (2008 to 2017).
5. **Recordkeeping Requirements:** Applicable standards recordkeeping was added and/or updated to reflect the current recordkeeping requirements. Facility-wide annual SO₂ recordkeeping was removed since the required ten years has passed.
6. **Reporting:** Applicable standards reporting was added and/or updated to reflect the current reporting requirements. Facility-wide annual SO₂ reporting was removed since the required ten years has passed.
7. **Facility Wide Operating Conditions:** Administrative changes were made to the text in Condition Nos. 7.A, 7.E, 7.H and 7.K to reflect the current standard ND facility wide operating conditions.
8. **General Conditions:** Administrative changes were made to the text in Condition Nos. 8.E, 8.F, 8.G and 8.M to reflect the current standard ND facility wide operating conditions.
9. **State Enforceable Only Conditions (not Federally enforceable):** No change.

Comments/Recommendations: It is recommended that Title V Permit to Operate No. AOP-28426 v6.0 be processed and considered for issuance following a 30-day public comment period and subsequent 45-day EPA review period.